

## California Grape Alliance Work Plan

The California Grape Alliance

Amount Funded: \$183,640

### Overview

The California grape community (wine, raisin, and table) will partner with the California Department of Pesticide Regulation (DPR) on a Pest Management Alliance project to protect and improve air and water quality in California by decreasing related risks associated with pesticides used in grape production. The project will constitute the first example of the application and transfer of the Sustainable Winegrowing Program's proven, self-improvement model to other grape sectors for reducing pesticide-associated risks and improving the sustainability of California agriculture.

The project will include education and outreach about some of the more obvious pests, pesticides, and practices associated with air and water concerns. This includes ensuring that growers and PCAs understand which pesticides have been detected in ground and surface water and have greater VOC emission potentials, relevant existing and proposed regulations, and drift mitigation tactics. More holistically, however, the project will ensure that practitioners understand and apply an array of basic IPM principles and practices (characterized in the second edition of the Code of Sustainable Winegrowing Practices Self-Assessment Workbook) pertinent to pesticides and air and water quality that collectively help growers and PCAs make informed decisions that balance cost-effectiveness with human and environmental health.

### Goals and Objectives

The project goal is to apply the Sustainable Winegrowing Program's "cycle of continuous improvement," to winegrapes, raisins, and table grapes to increase the adoption of economically viable IPM practices that decrease pesticide risks to air and water. The centerpiece of the cycle is the Code of Sustainable Winegrowing Practices Self-Assessment Workbook. The Workbook includes relevant criteria (specific management areas) for evaluating practices using a four-category scale (1 to 4; 4 is highest). Customized reports are generated that enable participants to quantify and track their performance against regional and statewide averages and the industry to publicly document its progress. Follow-up targeted education complements assessment and facilitates planning by emphasizing areas most needing improvement, according to region-specific analyses of assessment data.

Expected key deliverables for the project are:

- Increased collaboration among California grape sectors to collectively advance sustainable agriculture;
- Use of established quantitative methods to determine educational priorities for reducing pesticide risks to air and/or water in California grape production;
- Production and widespread distribution of pertinent educational materials;

- Establishment and use of 10+ demonstration vineyards featuring reduced-risk practices and technologies;
- Conduct 20+ targeted education events to involve 1000+ grape growers and PCAs;
- Quantification of progress in reducing pesticide risks to air and/or water through winegrower self-assessments and a cross-reference survey for raisin and table grape growers;
- A 20% statewide increase in winegrower performance (1 to 4 scale) against criteria pertinent to pesticides and air and/or water quality in the second edition of the Code of Sustainable Winegrowing Practices Self-Assessment Workbook;
- Survey results documenting the status of relevant practices in raisins and table grapes; and
- Production and dissemination of commodity specific reports for highlighting and communicating project results.

### **Work Plan**

**Objective 1** – Analysis and interpretation of preexisting winegrower self-assessment data to rank workbook criteria relevant to reducing pesticide risks to air and/or water by educational priority.

(a) Identify criteria and associated practices for reducing pesticide risks to air and/or water.

The Project Manager (Browde) and SureHarvest staff with guidance from the Management Team will review the Code of Sustainable Winegrowing Practices Self-Assessment Workbook and identify criteria and associated practices related to reducing pesticide risks to air and/or water. Time for the Project Manager and SureHarvest staff will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team and other Team Partners will provide in-kind support.

(b) Analyze statewide and regional assessment data for the identified criteria and rank criteria by educational priority (lower scoring and having most impact).

The Project Manager and SureHarvest staff will apply the Sustainable Winegrowing Program's assessment and reporting software to extract and analyze appropriate self-assessment data for the pre-selected criteria collected from over 807 vineyard enterprises representing more than 29.3% of the statewide winegrape acreage. The set of data collected after the release of the California Wine Community Sustainability Report 2004 will be sorted and analyzed to quantify updated statewide and regional averages for each pre-selected criterion. Based on average performance, the criteria will be ranked for both the state and for each region by educational priority, i.e. lower scoring criteria with practices determined to have most impact to air and/or water quality. Differences in educational priorities among regions are expected and necessary to determine to ensure additional education is warranted. Time for the Project Manager and SureHarvest staff will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team and other Team Partners will provide in-kind support.

**Objective 2** – Extension of information (targeted education) to promote cost-effective adoption of lower-risk practices associated with prioritized criteria.

(a) Agree on regional educational targets (including emerging issues) with grower organizations.

Because of commonality in pest management challenges and practices among the grape sectors, most of the identified workbook criteria and practices for winegrapes will apply to raisins and table grapes. Education targets for raisin and table grape growers will be refined based on discussions with leadership and experienced growers with Sun-Maid Growers and the Grape & Tree Fruit League. Likewise, additional educational needs not covered in the Workbook or specific to each region will be determined from discussions with regional organizations, e.g. Central California Winegrowers and the Sonoma County Winegrape Commission. For instance, new issues and educational needs for light brown apple moth, vine mealybug, and weed resistance; and new pest control strategies and tactics will be identified and agreed. Assessment results from complementary programs (Lodi-Woodbridge Winegrape Commission and the Central Coast Vineyard Team) will be used to enhance the targeting of project educational needs. Time and expenses for the Project Manager will be supported with PMA funds. The Management Team and Team Partners will provide in-kind support.

(b) Collect and develop educational materials characterizing pesticide risks to air and/or water and protective practices for distribution to winegrape, raisin, and table grape growers and PCAs at events and via newsletters and websites.

Educational materials pertinent to pesticides risks to air and/or water and associated protective practices will be collected, developed, and revised for widespread distribution to growers and PCAs at targeted education events and via newsletters, websites, and publications in trade magazines. Existing sources of information to support this effort include supplemental information in the second edition of the Code of Sustainable Winegrowing Practices Self-Assessment Workbook, Pest Management Strategic Plans, Crop-Pest Profiles, the Central Coast Vineyard Team's Positive Points System, the Lodi Winegrower's Workbook and Lodi Rules for Sustainable Winegrowing, the UC IPM Pest Management Guidelines, and numerous other compositions. Materials also will include model action plans for improvement based on results of winegrower assessments from the Sustainable Winegrowing Program. Time and expenses for the Project Manager will be supported with PMA funds. The Management Team and Team Partners will provide in-kind support.

(c) Establish and enhance 10+ demonstration vineyards with grower-cooperators and site spokespersons.

At least 10 demonstration vineyards (winegrape, raisin, and table grape) will be established across California's grape growing regions to showcase and discuss proven and cost-effective practices and technologies for reducing pesticide risks to air and/or water. Demonstration sites will be preferentially positioned in regions associated with non-attainment areas for ozone or water contamination by pesticides (e.g., San Joaquin Valley). Accordingly, 8 of the 10 planned sites will be established in the San Joaquin Valley – 3 each for raisin and table grape and 2 for winegrape. Two additional sites for winegrapes will be positioned outside the San Joaquin Valley. Sites will include grower-cooperators willing to serve as spokespersons at targeted education events. Time and expenses for the Project Manager will be supported with PMA funds. The Management Team and Team Partners will provide in-kind support.

(d) Conduct 20+ targeted education events (field meetings at demonstration vineyards, workshops, and seminars) for grape growers and PCAs in all grape-growing regions.

A combination of peer-to-peer education and presentations by technical and regulatory experts will be used to extend education about selected practices at a minimum of 20 events (workshops, field days, and seminars) conducted across the state. At least one field day will be held at each demonstration vineyard. Events will be widely advertised to growers of winegrapes, raisins, and table grapes and to PCAs. Interested growers of other crops also will be welcome. Time and expenses for the Project Manager will be supported with PMA funds. The Management Team and Team Partners will provide in-kind support.

**Objective 3** – Documentation of grower adoption of lower-risk practices relevant to pesticides and air and/or water quality and other project impacts.

(a) Conduct winegrower self-assessments against the criteria relevant to pesticide risks and air and/or water to quantify improvements in performance for winegrowers.

To quantify impacts of the targeted education activities (events and outreach via newsletters, websites, trade magazines, and other exchange), winegrowers will self-assess their performance against the workbook criteria pertinent to reducing pesticide risks to air and/or water.

Assessments will be collected after the onset of targeted education activities and be done at either dedicated self-assessment workshops or by growers independently using the Sustainable Winegrowing Program's online assessment and reporting system. Through widespread communication and encouragement, the Project Manager, Management Team, and Team Partners (winegrower associations) will advertise and promote the assessment workshops and online capability, ensuring substantial participation and a sufficient dataset for subsequent analyses. Time and expenses for the Project Manager will be supported with PMA funds. One-half of the anticipated time for CSWA consultants assisting with assessment workshops will be supported with PMA funds and one-half with matching funds. The Management Team and Team Partners will provide in-kind support.

(b) Design and conduct a survey of raisin and table grape growers to cross-reference adoption of lower-risk practices.

Currently, the Sustainable Winegrowing Program's assessment and reporting software is not designed to accommodate raisin and table grape growers. Thus, raisin and table grape grower performance against the pertinent criteria will be ascertained from a survey that cross-references criteria and associated practices from the Code of Sustainable Winegrowing Practices Self-Assessment Workbook. The survey will be submitted to raisin and table grape growers towards the end of the targeted education interval to appropriately account for project impact. Leadership from raisin and table grape organizations will ensure that the survey reaches their membership. Time and expenses for the Project Manager will be supported with PMA funds. SureHarvest staff will co-lead the design of the survey and will be supported with PMA funds. The Management Team and other Team Partners will provide in-kind support.

(c) Analyze and interpret assessment (winegrower) and survey (raisin and table grape growers) results to quantify and cross-reference adoption of lower-risk practices pertinent to pesticides and air and/or water quality.

The winegrower assessment data collected during this project (after the onset of targeted education) will be analyzed to quantify impacts of this project on statewide and regional performance against the pre-selected criteria pertinent to pesticides and air and/or water quality.

Importantly, the statewide analysis will determine the extent of progress made in reaching the 20% improvement goals established in the California Wine Community Sustainability Report 2004. As aforementioned, the results of the survey will be used to determine project impacts on the performance of raisin and table grape growers. Although the survey will be unable to detect progress, results will enable an updated snapshot of relevant practices. The project is expected to significantly and similarly improve grower performance across the three grape sectors. Time and expenses for the Project Manager will be supported with PMA funds. SureHarvest staff will help lead analyses and be supported with PMA funds. The Management Team will provide in-kind support.

(d) Produce and disseminate commodity specific reports documenting the project and achievements in reducing pesticide risks in winegrape, raisin, and table grape production.

Separate final reports per grape commodity will be produced and made widely available to highlight the project and its achievements in reduced-risk pest management. Time and expenses for the Project Manager will be supported with PMA funds. The Management Team (especially the raisin and table grape leadership) and Team Partners will provide in-kind support.

**Objective 4** – Execution of key grant administration activities.

(a) Hold post-grant acceptance meeting with the Management Team to review and advance objectives and tasks during January 2008.

Time for the Project Manager will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team mostly will provide in-kind support but some mileage costs will be covered with PMA funds.

(b) Conduct quarterly meetings with the Management Team to review project progress and advise next steps—meetings during April 2008, July 2008, October 2008, January 2009, April 2009, July 2009, October 2009, and January 2010.

Time for the Project Manager will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team mostly will provide in-kind support but some mileage costs will be covered with PMA funds.

(c) Produce and submit semiannual progress reports and the final report to DPR (progress reports due July 31, 2008, January 31, 2009, July 31, 2009, and January 31, 2010; final report due May 14, 2010).

Time for the Project Manager will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team will provide in-kind support.

(d) Produce and submit reimbursement materials accounting for quarterly expenditures (invoice, invoice report, and documentation of expenditures) to DPR.

Time for the Project Manager will be supported with matching funds. Expenses for the Project Manager will be supported with PMA funds. The Management Team will provide in-kind support.